

**REMARKS**

Claims 1-4, 6-9, 13 and 14 currently appear in this application. The Office Action of December 13, 2005, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

**Election/Restrictions**

Applicant hereby affirms the election of Group I, claims 1-7 and 10-12.

**Claim Objections**

Claims 2 and 3 are objected to because "ceramics" causes a grammatical error.

In accordance with the Examiner's helpful suggestions, "ceramics" has been replaced with -ceramic--.

**Rejections under 35 U.S.C. 112**

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

This rejection is respectfully traversed. The present amendment replaces "plate-like" and "pipe-like" with -plate-and -pipe--, respectively.

Art Rejections

Claims 1-4, 7 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Bardhan et al.

This rejection is respectfully traversed. Claim 1 has been amended to recite that the ionic conductor is a diaphragm wherein hydrophobic groups are attached to the surface of the continuous pores. Support for this amendment can be found in the specification as filed at page 6, last paragraph and page 17, last paragraph. The hydrophobic groups on the continuous pores can render the porous body hydrophobic, thus preventing a liquid, e.g., an electrolyte, from passing therethrough. Therefore, the porous body can serve as a diaphragm which isolates two different kinds of liquids e.g., electrolytes, while allowing only ions to pass through.

Bardhan discloses a porous substrate for DNA arrays. Generally, in order to enhance hybridization with target DNA sequences in a solution, this type of porous substrate must have a hydrophilic property rather than a hydrophobic property. This hydrophilic porous substrate cannot isolate two different kinds of liquids. Thus, the porous substrate disclosed by Bardhan is not a diaphragm.

Claims 1-3 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 58-027559, hereinafter JP '559.

This rejection is respectfully traversed. JP '559 discloses an absorbent that must have a hydrophilic property. JP '559 states that, in order to enhance a hydrophilic property with blood, it is preferable to cover a surface of a porous glass with a hydrophilic polymer substance. According to the original Japanese specification, the surface of the

porous glass is covered with a hydrophilic substance rather than a hydrophobic substance. This adsorbent absorbs low-density lipoprotein particles, and allows liquids to pass through the pores. The presently claimed diaphragm, however, does not allow liquid to pass through the pores.

Claims 1-5 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 58-026819, hereinafter JP '819.

This rejection is respectfully traversed. JP '819 discloses a porous glass adsorbent for selective removal of low-density lipoprotein. As with JP '559, this adsorbent must have a hydrophilic coating to adsorb the low-density lipoprotein. Moreover, this adsorbent allows liquid to pass through the pores.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP '819 in view of Clough.

This rejection is respectfully traversed. JP '819 teaches hydrophilic groups on the surface of the adsorbent, rather than hydrophobic groups. Because JP '819 teaches groups opposite those claimed herein, so there would be no reason to use the hydrophobic groups of Clough in the device of JP '819.

It is apparent that Bardhan and JP '819 do not teach or suggest hydrophobic groups attached to the surfaces of the continuous pores. In this regard, the Examiner stated that Clough teaches alkyl groups used as hydrophobic groups attached to porous ceramics. However, as noted above, the porous materials disclosed in Bardhan, JP '559 and JP '819 require that the surfaces of the devices disclosed therein be hydrophobic. Therefore, one skilled in the art would not attach hydrophobic groups to the substrate used for a DNA

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probe and to the absorbent. Indeed, there is no motivation for such a combination of elements in any of Bardhan, JP '599 or JP '819. To establish obviousness based upon a combination of elements, the references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination (see MPEP 2141).

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

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